

a hose line (26) which is connected to the pressure connection device (25) in the nebuliser device.

22. Therapeutic aerosol device according to any one of the preceding claims, characterised in that a sensor device (34, 37, 41) to determine the main aerosol flow or the pressure fluctuations is provided on the flow resistance device (11).

23. Therapeutic aerosol device according to claim 22, characterised in that an evaluation device (35) and a display device (36) are connected to the sensor device (34) to indicate to the patient whether the main aerosol flow or the pressure fluctuations are sufficiently within the area of the flow resistance device (11).

24. Therapeutic aerosol device according to any one of the preceding claims, characterised in that the sensor device comprises a movable display element (41) which is arranged in a display section (38) of the sensor device (37) and is moved by the main aerosol flow or the pressure fluctuations.

25. Therapeutic aerosol device according to any one of claims 1 to 23 for the application of one or more of the following substances:

substances with an anti-inflammatory action, for example: betamethasone, beclomethasone, budesonide, ciclesonide, dexamethasone, desoxymethasone, fluoconolone acetonide, flucinsonide, flunisolide, fluticasone, icomethasone, rofleponide, triamcinolone acetonide, fluocortin butyl, hydrocortisone aceponate, hydrocortisone buteprate buteprate, hydroxycortisone-17-

shape with a first area (A-A) with a large diameter and a second diameter (B-B) with a small diameter.

16. Therapeutic aerosol device according to any one of the preceding claims, characterised in that the nebuliser device (1) comprises an air inlet flue (9) and the pressure connection device (25) is intended to supply pressure fluctuations at the air inlet flue (9).
17. Therapeutic aerosol device according to claim 16, characterised in that the pressure connection device (25) comprises a meander-shaped guide (27) for the compressed air.
18. Therapeutic aerosol device according to any one of the preceding claims, characterised in that compressed air is supplied through the pressure connection device (25).
19. Therapeutic aerosol device according to any one of the preceding claims, characterised in that the frequency of the pressure fluctuations lies within the range from 10 to 100 Hz, preferably in the range from 15 to 55 Hz.
20. Therapeutic aerosol device according to any one of the preceding claims, characterised in that the pressure fluctuations are generated by means of a membrane compressor comprising a membrane (21) that seals a pressure chamber (20) in a pressure-tight way and is moved to and fro by a piston rod.
21. Therapeutic aerosol device according to claim 15, characterised in that the pressure chamber (21) comprises a connecting piece (24) for the connection of